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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,766	01/25/2002	Teresa Mah	MS#183302.1 (4966)	4609

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SENNIGER POWERS LEAVITT AND ROEDEL
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EXAMINER
HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
2121	

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3

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 January 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-31</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-31</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-31 are pending in this application.

2.   The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light

of the supporting disclosure. *In re Morris,* 127 F.3d 1048, 1054-55, 44USPQ2d 1023,

1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in

the claim are not read into the claim. *In re Prater,* 415 F.2d, 1393, 1404-05, 162 USPQ

541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The

Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Examiner will reference prior art using terminology familiar to one of ordinary skill in the

art. Such an approach is broad in concept and can be either explicit or implicit in

meaning.

3.   .Examiner's Opinion:

        Para 2 above applies. The claims fail to bring forth the merits of the

specification.

Claim Objection

4.   Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is

required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

dependent form, or rewrite the claim(s) in independent form. When a claim spans the

entire spectrum of minimum to maximum to include both, such a claims cannot be

limiting on claim 3 that it relates to.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

6.   Claims 1-12, 14-22 and 26-30 rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. The language of the claim raises a

question as to whether the claim is directed merely to an abstract idea that is not tied to

a technological art, environment or machine which would result in a practical application

producing a concrete, useful, and tangible result to form the basis of statutory subject

matter under 35 U.S.C. 101. The claims appear to be software per se and not

functionally descriptive material. Claims 26 and 27 identify fixed fields which are not

data structures.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

8. The specification shall contain a written description of the invention, and of the

manner and process of making and using it, in such full, clear, concise, and exact terms

as to enable any person skilled in the art to which it pertains, or with which it is most

nearly connected, to make and use the same and shall set forth the best mode

contemplated by the inventor of carrying out his invention.

9. Claims 1-12, 14-22 and 26-30 are rejected under 35 USC 112, first paragraph

because current case law (and accordingly, the MPEP) require such a rejection if a 101

rejection is given because when Applicant has not in fact disclosed the practical

application for the invention, as a matter of law there is no way Applicant could have

disclosed how to practice the undisclosed practical application. This is how the MPEP

puts it:

> ("The how to use prong of section 112 **incorporates as a matter of law** the requirement of
> 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the
> invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application
> also fails as a matter of law to enable one of ordinary skill in the art to use the invention under
> 35 U.S.C. § 112."); In re Kirk, '376 F.2d 936, 942, 153 USIPQ 48, 53 (CCPA 1967) ("Necessarily,
> compliance with § 112 requires a description of how to use presently useful inventions,
> **otherwise an applicant would anomalously be required to teach how to use a useless
> invention.").** See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

> Therefore, claims 1-12, 14-22 and 28-30
> are rejected on this basis.

10. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not teach "retention rate is measured by a frequency relative to

either the root node or the previous child node."

11.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

12.   Claims 3, 5, 6 and 15 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Concerning claim 3,width criterion is used at

the top of the funnel, middle of the funnel and bottom of the funnel (specification p 7, l

19-22; p 8, l 1-2). The width criterion represents a retention rate that specifies a

minimum width or maximum width or both. Without knowing features related to the

width criterion, the metric is ambiguous and renders the claim indefinite. Concerning

claim 5, the width of a point can be measured in terms of both absolute and relative

frequency (specification p 7, l 19-22; p 8, l 1-2). A rate and a frequency are two different

types of metric and are not equivalent. Consequently, claim 5 is indefinite. Concerning

claim 6, width criteria that specifies minimum width, maximum width or both reduces this

claim to the level of indefiniteness. Concerning claim 15, the phrase "that can serve as a

root node in one of the tree structures or both" is indefinite.

Claim Rejections - 35 USC § 102

13.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14.   Claim1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by

Copperman et al (U.S. Pub 2003/0115191, referred to as **Copperman et al**).

Claim 1

Copperman anticipates storing each ordered path within the CS in one of up to N

tree structures, each of said tree structures having a root node P_i corresponding to one

of pages P_i to P_N and having successive child nodes corresponding to the successive

pages after P_i of P_{i+1} to P_{i+x}, said X representing a depth criterion (**Copperman, ps**

0037, 0042; Examiner's Note (EN): each tree will have a root node with children

following, the depth depending on the number of nodes; to one of ordinary skill in the art

pages are blocks of memory); and extracting a list of stored paths from each tree

structure from the root node P_i to each end node to represent a set of funnels

corresponding to the CS (**Copperman, p 0042**; EN: a funnel is an ordered path).

Claims 2, 22

Copperman anticipates storing comprises incrementing a counter associated with

each node in each ordered path as the ordered path is stored, and further comprising

analyzing each stored path in each tree structure using the counters to identify the stored paths that satisfy one or more selected input criteria (**Copperman**, ps 0037, 0042; EN: incrementing a counter associated with a node is synonymous with content mapping to concept nodes).

Claims 3, 25

Copperman anticipates the input criteria is selected from a group consisting of a width criterion, a starting page criterion, and an end page criterion, said width criterion representing a retention rate, said starting page criterion specifying a set of pages in CS from which P_i is selected, and said end page criterion specifying a set of pages in CS that can serve as end nodes in each tree structure (**Copperman**, ps 0037, 0042; EN: the width criterion is not evaluated because of the indefinite character that it represents (see above); Copperman has starting and ending nodes which represent pages or memory blocks).

Claim 4

Copperman anticipates retention rate is measured by a frequency relative to either the root node or the previous child node (**Copperman**, p 0037 EN: frequency is not evaluated because of the indefinite character that it represents (see above)).

Claim 5

Copperman anticipates retention rate is measured by an absolute frequency (**Copperman**, p 0037 EN: rate is typically the first derivative of a function and frequency is defined in cycles per unit of time; frequency conveys the concept of oscillation and rate conveys trend; to equate the two, raises the issue of indefiniteness).

Claim 6

Copperman anticipates the width criterion specifies a minimum width or a maximum width or both (**Copperman**, ps 0036, 0037; EN: width criteria is considered indefinite since it can be anything).

Claim 7

Copperman anticipates depth criterion specifies a maximum depth (**Copperman**, ps 0036, 0037; EN: depth is merely the number of nodes that one experiences and is generic).

Claim 8

Copperman anticipates wherein the depth criterion represents a desired number of pages in each stored path (**Copperman**, ps 0036, 0037; EN: depth is merely the number of nodes that one experiences and the metric is generic).

Claim 9

Copperman anticipates wherein P_i corresponds to one of P_1 to P_N specified as starting page criterion (**Copperman**, ps 0036, 0037; EN: one starts from the beginning (P_i) as one starts from the beginning of an initiation).

Claims 10, 16, 20, 21

Copperman anticipates the stored path is a subpath (**Copperman**, ps 0036, 0037; EN: it is axiomatic that a stored path would be a subpath of something to include itself such as a recursed path).

Claim 11

Copperman anticipates storing comprises scanning the CS one time

(**Copperman**, ps 0037, 0038).

Claim 12

Copperman anticipates automatically generating a report of the extracted list of

stored paths (**Copperman**, p 0035).

Claims 13, 18, 23, 31

Copperman anticipates computer readable media having computer-executable

instructions for performing the method recited in claim 1 (**Copperman**, ps 0003, 0033).

Claim 14

Copperman anticipates storing one or more paths within the CS satisfying a first

input criterion in one or more tree structures (**Copperman**, p 0038); and analyzing each

tree structure to identify any of the paths that satisfy a second input criterion, said

second input criterion representing a width criterion (**Copperman**, p 0037; EN: distance

(further away) is synonymous to width).

Claim 15

Copperman anticipates the first input criterion comprises a depth criterion

specifying a maximum number of pages in each stored path or a starting page criterion

specifying a set of pages in the CS that can serve as a root node in one of the tree

structures or both (**Copperman**, p 0037; EN: pieces of content appropriately mapped to

concept nodes anticipates maximum number of pages (memory blocks) in a stored path

or a starting page (memory block) criterion)

Claim 17

Copperman anticipates creating a tree structure for each starting page of the one

or more paths (**Copperman,** p 0037); and creating one or more branches in each tree

structure for each path that starts with one of the starting pages (**Copperman,** Fig 2);

Claim 19

Copperman anticipates creating a tree structure for storing the ordered path for

each of the clickstreams, each tree structure having a root node corresponding to the

first page of the clickstream and having a child node corresponding to each of the

successive pages in the clickstream (**Copperman,** ps 0037, 0042); for each input

starting page, searching each tree structure to identify any stored path that starts at a

node associated with the input starting page and satisfies an input depth requirement,

said input depth requirement representing a desired number of pages in each path

(**Copperman,** ps 0037, 0038, 0041); storing each identified path in a temporary tree

(**Copperman,** ps 0037, 0042); and recursing through the temporary tree to identify any

path that satisfies an input width requirement, said input width requirement representing

a retention rate (**Copperman,** ps 0037, 0038, 0041; EN: recursing takes place through

a tree (path) using content gleaned from the dialog session which will satisfy an input

requirement).

Claim 24

Copperman anticipates storing each ordered path within the CS in one of up to N

tree structures, each of said tree structures having a root node P_i corresponding to one

of pages P_i to P_N and having successive child nodes corresponding to the successive

pages after P_i of P_{i+1} to P_{i+x}, said X representing a depth criterion (**Copperman**, ps 0037, 0042; Examiner's Note (EN): each tree will have a root node with children following, the depth depending on the number of nodes); a support component for incrementing a counter associated with each node in each ordered path as the ordered path is stored (**Copperman**, ps 0037, 0042; EN: incrementing a counter associated with a node is synonymous with content mapping to concept nodes); a funnel component for extracting a list of stored paths from each tree structure from the root node P_i to each end node to represent a set of funnels corresponding to the CS (**Copperman**, p 0042; EN: a funnel is an ordered path); and a criteria component for analyzing each stored path in each tree structure using the counters to identify the stored paths that satisfy one or more input criteria (**Copperman**, ps 0037; EN: input criteria is the root node that defines a directed acyclical graph; computer system is used to count the memory block and thus record the stored path) .

Claim 26

Copperman anticipates a first field storing a page name representing a name of the viewed web page associated with the particular node (**Copperman**, p 0275); and a second field storing a support value representing a frequency of appearance for a particular path starting with the root node of the tree structure and including the particular node (**Copperman**, p 0275; EN: frequency of co-occurrence represents a frequency of appearance).

Claim 27

Copperman anticipates the data structure is created for each distinct web page in the input clickstreams as the clickstream is scanned (**Copperman**, p 0042).

Claim 28

Copperman anticipates reading through CS from P_1 to P_X, wherein X is less than or equal to N and represents an input depth (**Copperman**, p 0042; EN: this is simply observing a set of nodes; X is not defined for values greater than N); creating a first tree with a root node associated with page P_1, and with successive child nodes associated with pages P_2 to P_X, wherein P_X represents a child node with parent P_{X-1} (**Copperman**, p 0042; EN: children follow parents); incrementing a counter associated with each node in the first tree as the node is created (**Copperman**, p 0042; EN: each node has a memory address; each memory address is numbered and counted); creating a second tree with a root node associated with page P_2, and with successive child nodes associated with pages P_2 to P_{X+1} (**Copperman**, p 0042; EN: children follow parents); incrementing a counter associated with each node in the second tree as the node is created (**Copperman**, p 0042; EN: each node has a memory address; each memory address is numbered and counted); creating additional trees rooted at each page P_{N-X+2} to P_N for all subpaths in CS starting with pages P_{N-X+2} to P_N (**Copperman**, p 0042); storing the subpaths that start at each page and ending at P_N in the respective tree so that new trees are created only when the trees or nodes have not already been created (**Copperman**, p 0042; EN: follows from "to span the body of content"); and running through all paths in each tree to extract and output only paths that satisfy input depth

and input width criteria (**Copperman**, p 0042; EN: which would include all paths since the stated criteria is indefinite).

Claim 29

Copperman anticipates processing another clickstream according to the method described in claim 28 (**Copperman**, ps 0037, 0038, 0041; EN: recursing takes place through a tree (path) using content gleaned from the dialog session which will satisfy an input requirement).

Claim 30

Copperman anticipates the tree for a page P_i is only created if P_i is part of an input starting page criterion (**Copperman**, ps 0037; EN: it is axiomatic that to start anything, one needs a point, place to start).

Conclusion

15.   The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Tamayo et al, U.S. Pub 2002/0083067

- Blair et al, U.S. Pub 2002/0007373

- Jain et al, U.S. Patent 6,571,333

- Gruyer et al, U.S. Pub 2002/0112048

- Joseph, U.S. Pub 2002/0143558

- Brownell, U.S. Pub 2002/0169980

- Frauenhofer et al, U.S. Patent 6,236,991

- Wical, U.S. Patent 6,199,034

- Dally et al, U.S. Patent 6,370,145

- Rivera et al, U.S. Pub 2002/0107699

- Dally et al, U.S. Patent 6,654,381

- Fleisher, III et al, U.S. Pub 2002/0136389

16.   Claims 1-31 are rejected.

Correspondence Information

17.   Any inquiry concerning this information or related to the subject disclosure

should be directed to the Examiner, Joseph P. Hirl, whose telephone number is

(703) 305-1668. The Examiner can be reached on Monday – Thursday from

6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the

Examiner's supervisor, Anthony Knight can be reached at (703) 308-3179.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

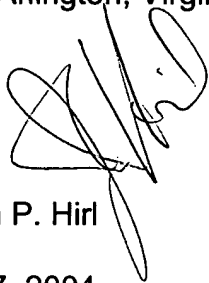(703) 746-7290 (for informal or draft communications with notation of

"Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

Joseph P. Hirl

April 27, 2004